**GRIN Therapeutics Receives FDA Breakthrough Therapy Designation for Radiprodil**

- Designation for treatment of seizures associated with GRIN-related neurodevelopmental disorder in patients with gain-of-function mutations recognizes radiprodil's potential to demonstrate substantial improvement over available symptom-based therapy
- Company preparing to initiate Phase 3 pivotal trial

**NEW YORK, NY,** February 25, 2025 – GRIN Therapeutics, Inc., a leader in the development of therapies to treat serious neurodevelopmental disorders, today announced that the U.S. Food and Drug Administration (FDA) granted Breakthrough Therapy designation to radiprodil, the company's investigational, potent negative allosteric modulator selectively targeting the N-methyl-D-aspartate receptor subtype 2B (NR2B or GluN2B), for the treatment of seizures associated with GRIN-related neurodevelopmental disorder with gain-of-function (GoF) mutations.

"The FDA's decision to designate radiprodil as a Breakthrough Therapy underscores its potential as a treatment option for patients who currently have no approved therapies," said Bruce Leuchter, MD, President and Chief Executive Officer at Neurvati Neurosciences and GRIN Therapeutics. "Radiprodil's mechanism, which targets the underlying disease biology, has demonstrated remarkable reductions in seizures in our Phase 1b open-label study and has the potential to meaningfully impact the non-seizure symptoms associated with this neurodevelopmental disorder. Our team is executing with urgency to advance the Phase 3 study and bring this potential first-in-class treatment to patients as quickly as possible. We look forward to working closely with the FDA throughout this process to ensure a rigorous and efficient development path."

Breakthrough Therapy designation is a process designed to expedite the development and review of drugs that are intended to treat a serious condition where preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over available therapy on a clinically significant endpoint(s). This designation grants radiprodil access to all the benefits of Fast Track designation, as well as intensive guidance by the FDA on an efficient drug development program and organizational commitment involving FDA senior managers.

"Over the course of my career, it has been extremely rewarding to both see and be part of the progress of innovation in the development of targeted therapies for the treatment of genetically defined epilepsies and neurodevelopmental disorders such as GRIN-related neurodevelopmental disorder," said Professor Jacqueline A. French, MD, Professor in the Department of Neurology at NYU Grossman School of Medicine, Division Director of Epilepsy, Co-Director of Epilepsy Clinical Trials at NYU Langone Health, Director of The Epilepsy Study Consortium, and member of GRIN Therapeutics' Clinical Advisory Committee. "The increased engagement with FDA that Breakthrough Therapy designation brings will ensure that the radiprodil program, developed in partnership with the academic and advocacy communities, has the best chance of success."

Breakthrough Therapy designation of radiprodil was supported by positive data from the Phase 1b Honeycomb study in pediatric patients with confirmed GoF mutations across GRIN genotypes. The data showed that treatment with radiprodil appeared to be generally well tolerated. Patients in the qualifying seizure cohort experienced a median reduction of 86% in countable motor seizure (CMS) frequency compared to baseline. During the trial period, 71% of patients had a greater than 50% reduction in CMS and six of seven were seizure-free during at least 80% of days in the eight-week maintenance period. Clinicians and caregivers generally assessed patients as improved clinically over the course of the study regardless of the occurrence of seizures as measured by Clinician and Caregiver Global Impressions of Change (CGI-C and CaGI-C) and the Aberrant Behavior Checklist – Community (ABC-C). Adverse events most commonly observed were those associated with infections or underlying disease symptoms. Three patients experienced an SAE associated with infection; all were assessed as unrelated to radiprodil.

The company remains on track to initiate a Phase 3 pivotal trial for radiprodil in GRIN-related neurodevelopmental disorder in mid-2025. The Phase 3 trial will aim to evaluate the impact of targeted treatment on core aspects of the disease, including seizures, behavioral abnormalities and functional outcomes. GRIN Therapeutics is backed by a $200M capital commitment from Blackstone Life Sciences.

**About GRIN-related neurodevelopmental disorder**

GRIN-related neurodevelopmental disorder is a family of rare, genetically defined pediatric neurodevelopmental disorders caused by mutations in GRIN genes. While symptoms of GRIN-related neurodevelopmental disorder can present as early as infancy, a diagnosis is often not confirmed until age two or later when a child fails to reach developmental milestones. Individuals may experience developmental delay, intellectual disabilities, epilepsy, muscular hypotonia, movement disorders, spasticity, feeding difficulties and behavioral problems. There are currently no approved therapies for GRIN-related neurodevelopmental disorder.

**About Radiprodil**

Radiprodil is an investigational, selective and potent negative allosteric modulator of the N-methyl-D-aspartate (NMDA) receptor subtype 2B (NR2B or GluN2B). In nonclinical studies, radiprodil has been shown to potently and selectively modulate GluN2B. Radiprodil has also demonstrated an antiseizure effect in a number of in vitro and in vivo preclinical seizure and epilepsy models and specifically in models characterized by an enhanced GluN2B NMDA transmission, which can occur with gain-of-function (GoF) mutations in GRIN-related neurodevelopmental disorder. In vitro analysis of brain tissues extracted from both tuberous sclerosis complex (TSC) and focal cortical dysplasia (FCD) lesions has shown enhanced GluN2B NMDA expression supporting the potential ability of radiprodil to control seizures in these conditions.

**About GRIN Therapeutics**

GRIN Therapeutics is dedicated to the research and development of precision therapeutics for pediatric neurodevelopmental disorders with the goal of bringing hope to patients and caregivers. Working to develop novel therapies for patients with neurodevelopmental disorders, the company

has two ongoing clinical trials to evaluate radiprodil for the potential treatment of GRIN-related neurodevelopmental disorder and other neurological conditions including tuberous sclerosis complex (TSC) and focal cortical dysplasia (FCD) type II. GRIN Therapeutics is an affiliate of Neurvati Neurosciences, a portfolio company of Blackstone Life Sciences (BXLS). For more information, please visit www.grintherapeutics.com

**About Neurvati Neurosciences**

Neurvati Neurosciences, a portfolio company of Blackstone Life Sciences, identifies and advances the development of high-potential drug candidates across the neuroscience landscape. Neurvati employs a collaborative model that establishes fit-for-purpose affiliate companies, aligning dedicated resources with long-term strategic capital to catalyze innovative treatment options in areas of unmet need. Neurvati's team of experienced operators and drug developers seeks opportunities to challenge current treatment paradigms and make a difference for patients suffering from a wide range of neurological and psychiatric disorders. For more information, please visit www.neurvati.com

**About Blackstone Life Sciences**

Blackstone Life Sciences is an industry-leading private investment platform with capabilities to invest across the life cycle of companies and products within key life science sectors. By combining scale investments and hands-on operational leadership, Blackstone Life Sciences helps bring to market promising new medicines and medical technologies that improve patients' lives and currently has more than $12 billion in assets under management.

**Corporate Contact**
Elliott Ruiz
+1 201.674.5417
elliott.ruiz@neurvati.com